Portland Harbor Superfund Site
Talking points and background information for tribal consultations
January 12-14, 2016

Slide 1

Introductory remarks:

- Thank you for hosting us today. This consultation is an important step to move forward with evaluating and proposing a cleanup approach for the site and we need to hear your thoughts and concerns about the site.
- Thank you and your staff for working with us through the years. Our regular staff interactions have made our field investigations more thorough, our analysis more applicable to the tribe's interests, and has better informed our cleanup options.
- We envision this partnership continuing through design, implementation, and long term monitoring of this cleanup to the benefit of all Willamette River stakeholders.
- EPA is conducting this consultation in accordance with EPA Policy on Consultation and Coordination with Indian Tribes, Executive Order 13175 and our regional guidance and is consistent with the tribal treaty rights policy coming out later this month.
- EPA would appreciate your comment on this proposed alternative today and following this meeting---with the rapidly moving schedule, we would appreciate your comments in the next month so we may fully utilize them in formulating our proposed plan.

AGENDA REVIEW

Slide 2

(Move quickly through background slides-page 5)

- Describe how Portland Harbor became contaminated, leading it to become a Superfund Site.
- This is a picture of the Willamette River from 1921, which shows various manufacturing, shipping, shipbuilding and timber processing activities that contaminated the river.
- For more than a century, the lower Willamette River served a significant role in the development and prosperity of Portland as well as the larger region served by both the Willamette and Columbia Rivers. The lower Willamette River has served the community, but it has also been the dump site for historic operations.

Slide 3

- Here, in the 1950s, is Gasco, a manufactured gas plant on the river about half way between Columbia River and downtown.

- Contaminants found off shore of this facility include: coal tar, cyanide, benzene, and a number of other contaminants associated with coal gasification.

Slide 4

- This is a photo from late 1920s and shows the dredge operation that created Swan Island Lagoon.

Slide 5

- The Willamette River stretches for many miles, from the Cascade mountains to the Columbia. It is the 19th largest river in the US.
- The PH SF site is located EPA's work addresses contamination in the river along the lower 10 miles of the Willamette River, just upstream of the Columbia River.
- While it goes a long way to cleaning up contamination and contaminant loading to the Columbia River, it does not solve regional issues that we know are of concern to the Tribe.

Slide 6

- At the Tribes' request, EPA listed Portland Harbor as a Superfund site on December 1, 2000
- The Tribes have been an important partner to EPA over the years.
- Your input has made our work better and we've included Tribal concerns into our evaluation.

Slide 7

This slide explains the Superfund process. There is Tribal involvement throughout the process. Take the time to explain the slide.

- First box on the left - Listing a site as a Superfund site. There were some early actions to clean up particularly contaminated areas in 2005 and 2008.
    - Tribes petitioned EPA to list the site
    - Formal Government to Government Consultations in 2006, 2012 and 2016.
- Yellow box - Data gathering. Risks that contaminants present to people and wildlife.
    - Tribes had input into the types and amount of data collected as well as how it was analyzed.
    - CRITFC fish consumption numbers were used to evaluate risks

- Middle box - Development of different cleanup alternatives
    - Tribes participate on Technical Coordinating Team, reviewing and commenting each step of the way.
- Dark green box Where we are now—ready to develop our preferred cleanup alternative
    - One of the goals of this consultation is to hear from you whether you believe this proposed cleanup alternative satisfies your tribal rights (Siletz, Grand Ronde treaties were taken away)
- Blue box - Selection of a cleanup decision – December 2016
- After decision is made, there is design and construction.
    - Tribal involvement will continue through these stages of the cleanup.
    - EPA is providing funding for work not funded by the Potentially Responsible Parties.

Slide 8

- The Portland Harbor site has been extensively investigated. This slide shows the list of contaminants that pose a risk to people or wildlife within the site.
- Contaminants in red (like PCBs) are the most prevalent and most extensive at the site and are therefore a focus for EPA. However EPA will be addressing all contaminants with its cleanup.
- The contaminants within the river pose a risk to people and the environment.
- Risks are highest for fish consumers and, in particular, nursing infants of mothers who regularly eat fish from the Willamette River.
- Adverse health effects to the infant include neurological and motor-control problems as well as lower IQ and poor short-term memory.
- The contaminants pose a risk to the survival, reproduction and growth of the other life along the river, such as birds, otters, fish, clams, crayfish, worms and insects

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Slide 9

- Through working with your Tribal staff and consultants, EPA was able to incorporate Tribal concerns into our evaluation of the site.
- For example, EPA included the Tribal fish consumption rates when evaluating risks to Tribal

people at the site.

- EPA also evaluated impacts to salmon and lamprey because we learned how important those are to the Tribes.
- The CRITFC study tells us the tribes eat both resident and migratory fish.
- Some fish stay in the Portland Harbor site their whole lives, while others spend less time there.
- Those that spend all their lives in the site are the most contaminated and most directly benefit from the cleanup.
- All fish will benefit as a result of the cleanup.

Slide 10

- These are the goals for cleanup that EPA has for the site. These goals aim to protect people and wildlife from contaminated sediment, fish and water.

Slide 11

- These represent the primary cleanup approaches for cleaning up sediment sites.
- The more active approaches include dredging, capping and treatment.
- The less active approaches include natural recovery, which is the process of cleaner sediment moving into the site and reducing the overall sediment contaminant concentration levels.
- SEGUE to Jim Woolford for national consistency additions.

Slide 12

TAKE THE TIME TO explain EACH of the alternatives fully.

- This is a figure of the Willamette River study area broken into two parts with the northern part of the river shown in the top figure. The two figures placed side by side represent the study area.
- This figure shows the range of cleanup options EPA is looking at, which range from less aggressive (depicted by red) and more aggressive options (which extend beyond the red into the green areas). The colors depict the footprint for the more aggressive cleanup approaches: dredging and capping.
- While decades have passed since much of the worst contamination was deposited, not much has changed. Active cleanup is still needed, particularly in what are called principal threat waste areas to allow the river to naturally recover.
- We can all agree that the river is not going to get cleaned up on its own.
- We need to address the areas of the river with the highest contamination by removing or covering contaminants (or treatment).

- So what we're looking at….is a picture of where we might use dredging and capping in the worst areas of contamination so that the river has a chance to heal.
- Colors indicate active work in progressively more aggressive action –B is the least aggressive (red); G (dark green) is the most aggressive in terms of active cleanup.
- Although EPA evaluates a no action alternative, there is nothing to show for alternative A.
- Monitored natural recovery is relied up on for all of the alternatives to varying degrees, ie. the most for B and the least for G.
- The time to reach remedial cleanup objectives is least for G and most for B.
- We've talked with your staff and read your comments-- we know you want a G plus alternative.
- G is the most aggressive alternative and we're about to show you a less aggressive recommended cleanup, but we believe it strikes the right balance between active cleanup and allowing the river to heal itself.
- We conclude that none of these alternatives work correctly in every part of the river on its own.
- In order to be protective some parts of the river need more aggressive cleanup, and some parts need less aggressive cleanup.
- With that in mind, we put together a combination of alternatives that we believe will achieve cleanup without over relying on MNR.

Slide 13

- Following from the last slide, this slide represents an option EPA is considering for cleaning Portland Harbor. The colors here are different from the last slide, because more information is shown in this figure. Each color represents a different cleanup approach:
    - Red is where there would be dredging with a cap,
    - Yellows shows areas to be dredged,
    - Green depicts an area for capping,
    - Blue shows where we will use enhanced natural recovery
    - Purple depicts riverbanks that will need to be cleaned up
- The areas shown in this figure represent areas of highest risk and as you can see are close to historic industrial activity. All of the options rely on the state's source control work.

Slide 14

- Just state the bullet points—indicate that these are the benefits of cleanup actions immediately after construction).

- The highest levels of contamination haven't gone anywhere over time and require active steps to achieve risk reduction.
- It makes more sense to tackle contaminated riverbanks next to contaminated sediment together to minimize impacts to the river as a whole and expedite efficient cleanup.
- Wildlife includes fish, crayfish, etc.
- This alternative attempts to minimize but not eliminate caps to avoid unnecessary usage restrictions and undue risk of recontamination in the future.
- Discuss tribal concerns about fish consumption on this slide.
- As a reminder, after active cleanup is completed we will monitor as the river recovers.

Slide 15

- After cleanup construction is complete, there will be a period of long term monitoring to evaluate the effectiveness of natural recovery. Periodic monitoring will be required for this site. If recovery is not happening, EPA will need to evaluate additional cleanup options.

Slide 16 and 17

Timeline is on 2 slides:

- We expect that there will be significant public interest in the proposed cleanup plan—and we hope to balance opportunities for meaningful comment and participation with the need to move this project forward to on the ground cleanup.
- We want to hear from you today.
- Follow up tribal consultation is at your discretion and we welcome the Tribe's ongoing feedback as we have for the last ~15 years.

NRRB and CSTAG Advisory Recommendations

- Comment on Cost - dredging and disposal costs seem higher than similar sites. Check that cost estimates are consistent with other site estimates.
- Comment that EPA should clarify the terms used (Remedial Action Level—RAL) and what they mean for the remedy.
- Suggest that we add a cleanup objective for the Columbia River (Based on Yakama comments to Boards)
- Suggest that EPA work with the state to establish a timeline for upland source control work and ensure that work is coordinated with EPA's cleanup
- Suggest that EPA include climate change assessment

- Question why there is dredging in areas that could be capped
- Comment that EPA should explain how existing Tribal Treaty rights are being addressed as part of the remedy selection